

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:  
initiating a transaction using a protocol that directs packets based on physical location of a receiving device over a switching fabric that directs packets based on path routing information in packets, by establishing a virtual link partner relationship between a first component and a second component coupled by a switching fabric, wherein the transaction is used in establishing a power management state of a given link that is shared by the first and second components, the power state of the first component transitions upon a transition of the power state of the second component.
2. (Original) The method of claim 1 wherein the switching fabric includes a pair of bridges.
3. (Currently Amended) The method of claim 1 wherein the protocol is a Data Link Layer Packet protocol (DLLP) and the switching fabric is a Peripheral Component Interconnect (PCI) fabric, ~~and the transaction is used in establishing a power management state of a given link that is shared by the first and second components.~~
4. (Original) The method of claim 1 wherein the transaction is for a protocol communication that assumes a point-to-point connection between link partners.
5. (Original) The method of claim 2 wherein initiating includes:

issuing by the first component a data link layer packet protocol packet to a protocol virtualization control register in the bridge that is associated with the first component.

6. (Original) The method of claim 5 wherein initiating further includes:

decoding the data link layer packet protocol packet issued by the first component and sending an event notification to a protocol virtualization control register in the bridge for the second component.

7. (Original) The method of claim 5 wherein initiating further includes:

writing an event notification into the protocol virtualization control register within the bridge for the second component.

8. (Original) The method of claim 5 wherein initiating further includes:

generating a corresponding DLLP packet; and  
sending the corresponding DLLP packet to the second component.

9. (Previously Presented) The method of claim 2 wherein initiating comprises:

issuing by the first component a data link layer packet protocol packet to the bridge associated with the first component;

decoding the data link layer packet protocol packet issued by the first component and sending an event notification to the bridge for the second component; and

writing the event notification into a protocol virtualization control register within the bridge for the second component.

10. (Original) The method of claim 9 wherein initiating further includes:

generating a corresponding DLLP packet including data in the packet that was issued by first component; and

propagating the corresponding DLLP packet to the second component.

11. (Currently Amended) A computer program product residing on a computer readable medium for processing a packet comprises instructions to cause a computer to:

initiate a transaction by a first component to a second component over a switching fabric that requires routing information, wherein the transaction is used in establishing a power management state of a given link that is shared by the first and second components, the power state of the first component transitions upon a transition of the power state of the second component; and

establish a virtual link partner relationship between the first component and the second component in response to the initiated transaction.

12. (Original) The computer program product of claim 11 wherein the switching fabric includes a pair of bridges, each bridge including a protocol virtualization control register.

13. (Currently Amended) The computer program product of claim 11 wherein the instructions to initiate the transaction is a Data Link Layer Packet protocol (DLLP), the switching fabric is a Peripheral Component Interconnect (PCI) fabric, ~~and the transaction establishes a power management state of a given link that is shared by the first and second components.~~

14. (Original) The computer program product of claim 11 wherein the transaction is for a protocol communication that assumes a point-to-point connection between link partners.

15. (Previously Presented) The computer program product of claim 11 wherein instructions to initiate further comprises instructions to:

issue by the first component a data link layer packet protocol packet to a bridge associated with the first component.

16. (Previously Presented) The computer program product of claim 11 wherein instructions to initiate further comprises instructions to:

decode a data link layer packet protocol packet issued by the first component; and

send an event notification to a bridge for the second component.

17. (Previously Presented) The computer program product of claim 16 wherein instructions to initiate further comprises instructions to:

write the event notification into a protocol virtualization control register within a bridge for the second component.

18. (Original) The computer program product of claim 17 wherein instructions to initiate further comprises instructions to:

generate a corresponding DLLP packet, which is effectively the same packet that was issued by first component; and

propagate the corresponding DLLP packet to the second component.

19. (Previously Presented) The computer program product of claim 11 wherein instructions to initiate further comprises instructions to

issue by the first component a data link layer packet protocol packet to a bridge associated with the first component;

decode the data link layer packet protocol packet issued by the first component and sending an event notification to a bridge for the second component; and

write the event notification into a protocol virtualization control register within the bridge for the second component.

20. (Original) The computer program product of claim 19 wherein instructions to initiate further comprises instructions to:

generate a corresponding DLLP packet, which is effectively the same packet that was issued by first component; and

propagate the corresponding DLLP packet to the second component.

21. (Currently Amended) A network system comprising:

a switching fabric that requires routing information in packets that traverse the fabric;

a first component; and

a second component that communicates with the first component over the switching fabric by a protocol that is absent ~~does not include~~ routing information with the first component and the second establishing a virtual link partner relationship to communicate ~~communication~~ using the protocol, wherein the transaction is used in establishing a power management state of a given link that is shared by the first and second components, the power state of the first component transitions upon a transition of the power state of the second component.

22. (Original) The system of claim 21 wherein the switching fabric includes first and second bridges, each first and second bridge including a protocol virtualization control register.

23. (Currently Amended) The system of claim 21 wherein the protocol is a Data Link Layer Packet protocol (DLLP), the switching fabric is a Peripheral Component Interconnect (PCI) fabric, ~~and the transaction establishes a power management state of a given link that is shared by the first and second components.~~

24. (Previously Presented) The system of claim 21 further comprising:  
a device to store instructions to cause the first component to:  
issue a data link layer packet protocol packet to a protocol virtualization control register in a first bridge that is associated with the first component.

25. (Original) The system of claim 24 wherein the first bridge includes instructions to cause the first bridge to:

decode the data link layer packet protocol packet; and  
send an event notification to the second bridge for the second component.

26. (Previously Presented) The system of claim 24 wherein a second bridge associated with the second component includes instructions to cause the second bridge to:

receive an event notification into a protocol virtualization control register within the second bridge for the second component; and

generate a corresponding DLLP packet to the second component.

27. (Previously Presented) The system of claim 21 wherein the switching fabric comprises a first bridge associated with the first component and a second bridge associated with the second component wherein the second bridge includes a device to store instructions to cause the second bridge to:

receive an event notification into a protocol virtualization control register within the second bridge for the second component; and

generate a corresponding DLLP packet to the second component.

28. (Currently Amended) A network system comprising:

a pair of network components; and

a switching fabric coupling the network components, the switching fabric of the type that requires routing information in packets that traverse the fabric to couple the components and with the second component establishing a virtual link partner relationship to communicate communication using the a protocol, wherein the transaction is used in establishing a power management state of a given link that is shared by the pair of network components, the power state of the first component transitions upon a transition of the power state of the second component.

29. (Original) The system of claim 28 wherein the pair of components are computers coupled to a pair of bridges in the fabric, each bridge including a protocol virtualization control register.

30. (Currently Amended) The system of claim 28 wherein the protocol is a Data Link Layer Packet protocol (DLLP), the switching fabric is a Peripheral Component Interconnect (PCI) fabric, ~~and the transaction establishes a power management state of a given link that is shared by the first and second components.~~